

Studies in
Rural Finance

Economics and Sociology
Occasional Paper No. 951

WHY AGRICULTURAL CREDIT PROGRAMS
IN LOW INCOME COUNTRIES PERFORM POORLY

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September 15, 1982

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For several decades after World War II agricultural credit activities in low income countries seemed to be straight forward and uncomplicated. Most policy makers agreed that a majority of the farmers needed cheap loans to boost farm incomes and output, and that major aspects of credit programs in high income countries could be copied to meet these needs. Based on these views, many low income countries established credit cooperatives, supervised credit programs, marketing agencies that extended loans to farmers, or created agricultural banks in the 1950s and 1960s.^{1/} Large amounts of money were channeled through new or expanded intermediaries via special rediscount windows in central banks, and many regulations were issued to force lenders to make more loans to farmers. As a result, loans and grants for agricultural credit projects grew to be a large part of all funds directed to rural development by governments and donor agencies.

In the early 1970s a few people became disturbed about the results of these large credit efforts and the overall performance of rural financial markets (RFMs). They argued that the outcomes of many rural credit projects in low income countries were much more complicated and much less desirable than had been anticipated. An extensive evaluation of small farmer credit programs by the

^{1/} See Bauer, and Belshaw for further details on these views.

Agency for International Development in 1972-73, an agricultural credit policy paper by the World Bank in 1975, and a credit conference in Rome sponsored by the Food and Agriculture Organization in 1975 documented this concern.

Various combinations of at least 10 RFM problems were identified.^{2/} These included (1) cumbersome lending procedures that cause high loan transaction costs for both lenders and borrowers, (2) serious loan repayment problems, and (3) financial intermediaries that implode because their revenues are less than costs. It is also common (4) for RFMs to be badly fragmented, (5) for intermediaries to evade or ignore the intent of government regulations that adversely affect their economic interests, and (6) for strong patronal relationships to exist throughout the system. Borrowers depend on lenders, lenders depend on the central bank, and the central bank depends on the government or a donor agency for funds. (7) Seldom do these markets offer savings deposit services, and (8) it is common for intermediaries that do mobilize savings to transfer out of rural areas a significant part of the money mobilized. In some countries the volume of money moved out is larger than the amount put into rural credit systems by donor agencies and governments. Because many segments of RFMs are heavily dependent on outside money, (9) substantial political intrusions in these markets are common. (10) Worst of all, in most cases a very large part of the cheap agricultural credit

^{2/} See Adams and Graham for further detail and references on these problems.

ends up in the hands of the well-to-do, instead of the poor.^{3/}

These problems have caused malaise among policy makers and credit technicians. People have come to expect that rural credit programs will be mediocre. While the criticism of this malaise and associated problems have mounted, increasing attention has turned to clarifying the reasons for these problems and identifying treatments (e.g. Von Pischke). In the discussion that follows, I summarize the main causes for these difficulties and go on to briefly outline changes in policies that would cause RFMs to perform much better.

Problem Diagnosis

Over the past two decades I have looked at financial markets in several dozen low income countries, and have been impressed by the similarity of their problems. It is clear to me that traditional agricultural credit activities are doing a poor job of supporting development on both equity and efficiency grounds.^{4/} While the specific causes of these problems are time and place specific, at least five common reasons are often behind these difficulties: (1) agricultural credit efforts are based on faulty assumptions, (2) agricultural credit policies and overall use of RFMs are incorrect, (3) many bad loans result from various public policies that make farming a low economic return business,

^{3/} See various essays in the volumes published by the Agricultural Development Bank of Nepal and the Bangladesh Bank for further details on these problems in two Asian countries.

^{4/} See various essays in D. W Adams and others, editors, for more detail on these points.

(4) weak and incorrect research and evaluation have helped to reinforce faulty policies, and (5) donor agency assistance has too often reinforced policies that damage RFMs.

Faulty Assumption

It is surprising how many "truths" about rural credit and savings have been passed from generation to generation without question. These traditional assumptions have a powerful impact on agricultural credit policies, and they encompass borrower and saver behavior, lender behavior, and the behavior of financial markets.

It is regularly assumed, for example, that most farmers are too poor to save, especially in financial form, that most farmers need cheap credit before adopting new technology or making productive investments, and that most farmers need supervision to use credit wisely. All of these assumptions have the same ring to them as those challenged by T.W. Schultz in his book Transforming Traditional Agriculture in the early 1960s. His work along with that of Hopper, Mellor, Yotopoulos and others helped dissipate erroneous assumptions about the economic irrationality of rural people. While their arguments are now generally accepted, far too many people continue to stereotype rural people as irrational when it comes to financial markets. Why should a farmer be a careful economizer in product prices, in yields, in farm investments, and in input prices and then become an idiot when using a loan or holding financial savings?

I am convinced, with some research findings to support my views, that most rural people in low income countries do not regularly need formal loans, that those who do receive formal loans usually get few benefits from loan supervision, that most rural people will save more if given the opportunity and incentive to do so, and that low interest rates are not necessary to induce people to invest in high return activities. A significant amount of research has been done the past few years that shows that very substantial untapped savings capacities exist in rural areas, even among the poor (e.g. Ahn and others, Ong and others, and Kato).

Widespread suspicion surrounds financial intermediaries, especially those in informal market, and horror stories are quoted and repeated to sustain these biases. Most people who work in low income countries hear stories about moneylenders who charge an annual interest rate of 360 percent or more on a loan, who lend only because they know the borrower will default and the lender can take over the borrower's land, or the sons who are forced to assume their father's informal debt. Despite an increasing number of studies that show these horror stories are several standard deviations from the mean behavior of lenders, they continue to color agricultural credit policies (Barton, Domingo, Singh, Mayar, Harriss). In all too many countries, especially in the subcontinent, rural credit policy is misdirected at driving informal lenders out of business.

These suspicions about informal lenders are based on religious dogmas, on racial and ethnic biases, and on confusion regarding cause and effect. Most Western religions rely on scriptures that condemn usury. Numerous societies also restrict economic activities of ethnic minorities. Many Jews in Europe, the Chinese in Southeast Asia, the Indians in East Africa, and Middle Easterners in Latin America were excluded from all but marketing activities. These activities often involved financial intermediation to facilitate exchange. These ethnic minorities are viewed as suspicious outsiders to start with, and ethnic biases are reinforced by confusion and suspicion about all market intermediaries. The Physiocrats' views that only the farmer contributed useful goods in an economy, and Dark Age Christian views that market intermediaries would have a very hard time getting into heaven reinforced these biases.

Further, since any price is higher than a consumer wants to pay for a good, and producers always want to have a higher price for their products, both groups feel alienated by an impersonal marketing system. Both groups feel cheated by most market transactions, even though they participate in these transactions voluntarily. All too often they direct their frustrations at poorly understood intermediaries who appear to be leaches on society. Seldom does the consumer or the producer understand the workings of the market well enough to see how prices are determined, and the marketing intermediary is often a scapegoat.

Further ill feeling about financial intermediaries comes from those who are forced to borrow because of economic stress due to droughts, floods, or typhoons. It is easy for farmers to transfer their grumpiness about their loss to the taking of loans. The borrower is likely to see the loan as being part of the problem rather than as part of the solution. Later, if the borrower should default on the loan and be forced to forego collateral, the lender, not the natural disaster that destroyed the crop in the first place, becomes the focus of the farmer's anger and frustration.

A final set of damaging assumptions are about finance in general and how financial markets operate. In all too many cases credit is viewed as an input rather than as being a claim on resources and services. The essential properties of financial instruments, their fungibility and divisibility, are regularly ignored by hard pressed policy makers. This leads them to think that these claims can be tightly controlled and directed to specific uses. If the country wants more rice output, tagged loans for rice production ought to do the trick. If more fertilizer use is desirable, allocating more loans for fertilizer purchases is the right button to push. If the political system feels it is necessary to do something for the rural poor, opening a cheap credit loan window for small farmers is an easy policy alternative. Central credit planning, estimation of credit demand, and calls for credit impact studies result from this strategy.

The financial system is a magnificent political instrument

(Robert). Its manipulation is ideally suited to the planning mentality, even though it gives false illusions of control. In many cases governments have tried to assure financial intermediaries' compliance with government decrees by nationalizing banks or by creating more government owned banks. It is widely thought that a government owned bank can defy the laws of financial gravity: its revenues must cover costs if the intermediary does not go down hill financially. The landscape of low income countries is littered with rural financial institutions that policy makers thought could defy these laws. Formal financial intermediaries that persist are either seriously undermined by policy directives, have to continually rely on government or donor assistance, or largely evade the intent of regulations through innovation. I see surprisingly little difference between the behavior of government owned banks and those that are privately owned in most low income countries. A main difference is in the perception that policy makers have about their ability to manipulate these lenders. I also feel that most of these traditional assumptions about borrowers, savers, lenders, finance, and rural financial markets are very weak or false.

Incorrect Policies

In many respects it is unfortunate that financial markets are so susceptible to manipulation. It is very easy for a donor agency or a government to implement a new agricultural credit program in response to rural problems. Two aspects of these

intrusions into financial markets are troublesome. The first is the way these markets have been used in attempts to offset distortions in foreign exchange, product price controls, high priced inputs, various taxes, and lack of government investment in rural areas. Political intrusions into these markets have also been aimed at transferring income to the rural poor or at allocating political patronage to those who support the regime. In some cases cheap loans have also been used to induce rural people to join new organizations like agricultural cooperatives. In virtually all cases, agricultural credit programs have been used to move money quickly into rural areas. These efforts have emphasized loans to the almost total exclusion of voluntary savings mobilization.

These credit efforts have been accompanied by several damaging policies. Foremost among these has been the low and generally inflexible interest rates applied to most agricultural loans and to savings deposit services in rural areas. These low interest rates are justified as an offset to other price distortions, to transfer income to the rural poor, and to induce farmers to use formal loans and new technologies. These low interest rate policies are supported by concessionary rediscount facilities through the central banks, non-price rationing by the financial intermediaries, extensive loan reporting requirements that attempt to insure compliance with government credit allocation plans, and loan supervision. With the serious inflation in most low income countries the past 10 years, almost all interest

rates charged and paid in rural areas on formal financial instruments have been negative in real terms. As a result, borrowers repay lenders less in purchasing power than they borrow.

These low interest rates have powerful, largely unanticipated, effects on RFMs. The low rates make it difficult for financial intermediaries to mobilize significant amounts of voluntary private savings. This forces the intermediaries to rely on governments and donors to supply loanable funds and to become very susceptible to political intrusion. The low rates also make it difficult for lenders to cover their operating costs with interest revenues. This, in turn, forces the lender to continually go to governments or donor agencies for subsidies to cover operating expenses, or to gradually decapitalize, to shift a substantial part of their loan transaction costs to the borrower, and/or to reduce their costs of lending by making large loans to borrowers with ample collateral. The net result of this is that the lender becomes highly dependent on external funding, many potential borrowers are excluded from getting formal loans, concessionary priced loans are highly concentrated, and lenders have a hard time covering their costs.

Irrespective of the policy makers intent, a weak or bankrupt lender provides unsatisfactory financial services. All too often the employees of the intermediary are demoralized and discredited by this process. Accusations of fraud, mismanagement and incompetence typically surround the decline of these financial agencies. Personalities rather than policies are labeled as the

cause of the problem. The solution is seen as tightening up the administration, appointing new leadership, combining the weak organization with another that is better managed, or to create still another institution that must live within the same unfavorable environment. Under any political regime lending activities that cost the lender more than they are allowed to charge the borrower are conducive to institutional instability and dependence.

One might be able to accept the undermining of financial intermediaries as a worthwhile cost, as long as the equity and economic efficiency resource allocation objectives are met. But, as suggested earlier, low interest rates force lenders to concentrate loans in the hands of relatively few people. Three types of benefits accrue to borrowers: First is the normal net benefits one gets from profitable use of borrowed resources. Second is the implied income transfer associated with negative real rates of interest. And, third, is the income transfer benefits that accrue to those who default on loans. All three of these benefits are proportional to loan access; large borrowers get large benefits, small borrowers get small benefits, and non-borrowers get no benefit (Gonzalez-Vega, 1977). All savers and potential savers in financial form, of course, lose in this process.

Cheap credit also fails to correct for the misallocation of resources that results from other price distortions and policy shortcomings. Overvalued exchange rates, product price ceilings,

import duties on inputs, and lack of public investment in rural areas can seriously depress agricultural incentives, yields, and incomes. Governments regularly attempt unsuccessfully, to use cheap credit as a second-best policy to offset the effects other policies have on the way farmers allocate resources (e.g. David). A simple example may help to clarify why low interest rates do not induce farmers to allocate resources in a manner not signaled by their product prices and yields. Let's assume that a farmer in Thailand has a small dairy operation and also grows marijuana. Let's further assume that the Thai government sets a very low price on milk because of pressures from urban consumers and labor unions, and that this causes the farmer in question to want to shift resources away from milk production to more profitable activities. To discourage this, the government announces a special credit program for dairy producers that provides loans at negative real rates of interest to compensate farmers for the milk price disincentives.

For the moment, let's ignore the effect these low interest rates have on the behavior of the lender and savers and assume that all dairy producers get a cheap loan. The additional liquidity provided by the loan can be used by the borrower to buy more consumption goods, to expand production of marijuana, to enter into new economic activities, or to sustain milk production. But, there is no logical reason why the farmer would sustain milk production, with or without a cheap loan, since the economic returns from that activity are made unattractive by the price

control. Household consumption, marijuana production, and new economic activities would logically absorb most additional liquidity provided by the cheap loan.

Cheap credit does not make an unprofitable activity profitable! Further, the fact that low interest rates force lenders to concentrate loans in the hands of relatively few people means that the credit subsidy does not flow through the financial system in an equitable manner to all those who are forced to pay the "tax" imposed by the price control. Using cheap credit to offset the misallocation caused by other price and yield distortions is like trying to sweep water up hill.

Low Economic Returns in Agriculture

In part, the problems encountered by RFMs in low income countries are beyond the control of actors in these markets. Low product prices, expensive inputs, low and unstable yields, the lack of new technology and irrigation, pests, weeds, and natural disasters make farming a low return activity in many low income countries. At the same time, political instability, wars, cumbersome judicial procedures, and vague or uncertain land titles increase lending risks. Low returns to agricultural investments reduce the repayment capacity of borrowers, force many borrowers to seek small loans, and reduce savings capacities. These conditions restrict the scope for efficient financial intermediation and make it difficult for intermediaries to realize scale economies.

Most agricultural lenders in the U.S. and other developed countries have had it easy since World War II. Large amounts of money have been invested in these countries in rural infrastructure and in agricultural research, and it is also common for high income countries to provide price supports or subsidies that give strong production incentives to farmers. Grain price supports in the European Common Market, milk price supports in the U.S., and rice price supports in South Korea and Japan are prominent examples of policies that raise the returns and incomes of farmers in high income countries. For most of the past 40 years in high income countries, agricultural lenders could make a large number of loans that had a high likelihood of being repaid, even if lenders were blind, deaf, and dumb.

In sharp contrast, most of the low income countries treat their agricultural sectors harshly: overvalued exchange rates tax agricultural exports; import restrictions that protect infant industries force farmers to pay inflated prices for their inputs; food price controls weaken or destroy farmers' incentives to produce; the lack of public investment in rural areas further decrease the returns that farmers can expect from their investments; yield, price, and political instability also force farmers to be very conservative in their production and investment decisions. Some of the best agricultural loan officers in high income countries would have a difficult time putting together a strong, small portfolio of agricultural loans in countries like Ghana, Peru, Jamaica, Bangladesh, and Egypt.

Clearly, higher agricultural prices and yields would be a major step forward in allowing RFMs in low income countries to perform better.

Weak Research and Evaluation

It should come as no surprise that much of the research done on RFMs over the past 30 years has been closely tied to the policies, strategies, and assumptions already discussed. Until recently, relatively little of this research tested policies and assumptions (e.g. Grewal). In many low income countries a majority of the research has attempted to measure the impact of credit use at the farm level, and to also estimate the amounts of additional credit needed. Using a medical analogy, very little time has been spent in diagnosing the reasons for RFMs problems. It is difficult to prescribe proper treatment without diagnosis. The modest amounts of research done on savers' behavior, the behavior of financial intermediaries, and work on the overall performance of RFMs reflects the effects of strongly held traditional assumptions.

Far too much research has ignored fungibility. Most micro research has not considered all of the sources and uses of liquidity for farm households. Too many researchers have tried to draw conclusions about cause and effect in farm households after studying only one source of liquidity, a formal loan, and only one use of liquidity like the purchase of fertilizer.

Seldom is this type of research able to establish that the fertilizer would not have been purchased without the loan--the additivity issue.

Still other studies try to measure the impact of loans by comparing borrowers' activities with non-borrower activities. This ignores that farmers go through a selection process when they receive loans. Borrowers are not a random sample of all farmers. Those who receive loans may do better than farmers who do not borrow, not because of the loan, but because they were better farmers to start with.

Overall, I feel that much less farm level impact research is needed and that more research effort ought to be directed to testing assumptions and policies that are closely associated with rural financial markets. Further, I feel that more research is needed on the determinants of RFM performance. This type of research would shed more light on why things do not work well in these markets and also provide useful insights on remedies.

Donor Assistance

Most people look at donor assistance as an important part of RFM problem solution. In a number of low income countries donor loans and grants have made up a large part of the total agricultural loan portfolio. An agricultural credit project is highly desirable for both the donor and the local government. From the donor's side, credit projects are easy ways of moving quickly large amounts of money. With few exceptions, money lent for agricultural credit can be disbursed rapidly, generally

requires little technical assistance, and is straight forward and simple. For the local government, these projects are also easy to arrange and allow the country access to large amounts of foreign exchange with few strings attached. Both the donor and the government go through a joint, self-delusion exercise when they consummate a loan for agricultural credit. They both ignore that the country does not need foreign exchange to expand the amount of local currency used for agricultural loans. Printing presses in the central bank do a dandy job of this. The external loan has three primary impacts. First, it provides the government with more foreign exchange. Second, it orients RFMs toward external sources for their funding. And third, the loan can reinforce important policies that have a very substantial impact on the overall performance of RFMs (e.g. Gonzalez-Vega, 1982).

External funds reinforce the dependency mentioned earlier, make it easier to sustain low interest rate policies, and discourage intermediaries from mobilizing savings. Concessionary rediscount facilities set up to move donor funds from the central banks to rural intermediaries are particularly damaging. I vividly remember asking the manager of an agricultural development bank in a low income country why he did not offer savings deposit services in any of his branches. During the previous several years urban financial intermediaries in his country had been very successful in mobilizing large amounts of voluntary savings from relatively low income households. His reply was that he saw no

need to bother with troublesome savings accounts, on which he would have to pay savers 6 percent interest, when he could get virtually all of the money he wanted out of donor funds available through the central bank for less than 4 percent! Dozens of managers of formal agricultural credit agencies in low income countries come to the same conclusion. All of the potential savings in rural areas that do not take place because many people receive low returns to savings, or in fact lack any acceptable places to hold additional savings, are major cost of these concessionary rediscount facilities.

Treatments

In large measure, problems in RFMs are pressing because the strengths and weaknesses of financial markets are obscured by extensive sub-intellectual underbrush. Until recently, researchers have done a poor job of clearing away the misconceptions and erroneous assumptions that clouded what goes on in RFMs. I know of no other area in development where there is a wider gap between policy makers perceptions and actual events, than is the case in RFMs.

What can and should a rural financial market contribute to a country's development? I feel that its role is limited, rather straight forward, but nonetheless very important. A well functioning financial market should provide loans to most of those who have economic opportunities that exceed the capacity of their own resources. A well functioning formal RFM is doing well if it

services 20-25 percent of the farmers in a country. If roughly half of the farmers in the country have regular access to either formal or informal loans I feel the financial markets is doing a remarkably good job.

Providing loans to farmers is less than half of the financial intermediation picture, however. A much larger number of rural people can benefit from convenient, safe, and high return savings deposit facilities. A properly functioning RFM should provide deposit facilities to more than three-quarters of the rural population. At present, most people in rural areas do not have access to these deposit facilities, and only a few receive the large majority of the cheap credit. Changes in the use of RFMs in development must stress a more balanced and equitable use of these markets.

Policy makers must realize that it is impossible to use RFMs as a way of making income distributions more equal. Under the best of circumstances, the operations of financial markets will have a slightly negative effect on income distribution. (This would be a large improvement over what is currently happening, however.) Furthermore, it is becoming increasingly clear that cheap credit is a very ineffective instrument to compensate farmers for low product prices and yields. Cheap credit fails on both equity and efficiency grounds. Further, cheap credit policies distort and undermine financial intermediaries activities, make these institutions much more susceptible to political manipulation, and substantially diminish their capabilities.

Despite the confusion that surrounds RFMs, the treatments for its problems are relatively simple. First and foremost, much more emphasis must be placed on encouraging these markets to vastly expand their savings mobilization efforts. Doing so would provide this valuable service to a large number of the rural poor who currently have few attractive savings opportunities. It would also reorient managers of financial intermediaries away from stroking government and donor officials to assure more loanable funds, to doing a better job of serving rural clients. This, in turn, would reduce the patronal relationships that currently dominate most RFMs. This would cause financial intermediaries to be less susceptible to political intrusions, and also encourage local social sanctions on those who default on loans. In most countries it is socially acceptable to steal money from the government, but not acceptable to do so from neighbors.

It will also be necessary to sharply revise interest rate policy. Savers will not hold substantial amounts of financial assets if the expected real rates of return are negative. Nominal rates of interest that are generally higher than expected rates of inflation are vital for aggressive savings mobilization efforts. Higher and more flexible rates on savings require higher and more flexible rates on loans. These higher rates would reduce the demand for loans among those who currently use large amounts of cheap credit, allow more lenders to cover their costs without subsidy and also encourage lenders to reduce the

costs of transacting loans for both borrowers and themselves. This would result in less non-price rationing of credit and also reduce the transaction costs of some to get access to loans. Higher interest rates would also allow intermediaries to service a broader range of businesses in rural areas than just farmers. With higher interest rates, lenders would also be willing to lengthen the term structure of their loans.

Policy makers should not try to accomplish too much with financial markets. Product prices, crop yields and the costs of production are much more powerful determinants of farmers decisions than are credit availability or interest rates. Some of the money and energy that is currently largely wasted in pushing cheap credit programs would be better directed at making product prices more attractive and in developing new technology that boosted yields and lowered costs of production.

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